APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/696,462	10/25/2000	Marlon B. Roa-Diaz	100.134US01	4031

7590 05/06/2004	EXAMINER	
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P.O. Box 581009		
Minneapolis, MN 55458-1009	ART UNIT	PAPER NUMBER
	2662	

DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	Application No.	Applicant(s)
	09/696,462	ROA-DIAZ, MARLON B.
	Examiner	Art Unit
	AHMED ELALLAM	2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 October 2000*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-39* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-13, 20-34, 38 and 39* is/are allowed.

6)☒ Claim(s) *14-19 and 35-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 October 2000* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claim Objections

1.   Claim 18 is objected to because of the following informalities:

Claim 18 depends from itself. It is assumed hereinafter that it depends from claim

17. Appropriate correction is required.

Drawings

2.   The drawings are objected to under 37 CFR 1.83(a). The drawings must show

every feature of the invention specified in the claims. Therefore, the "error cell

generator" must be shown or the feature(s) canceled from claims 4 and 10. No new

matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the

Office action to avoid abandonment of the application. The objection to the drawings

will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

3.   Claims 14-18 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

In claim 14, it is not clear what is meant by the phrase "when a virtual connection changes to at least one selected condition, switching to the protection route for that virtual connection". More specifically, the meaning of the change to a selected condition is not clear. It is not clear what the condition consist of and what other conditions among which the selection took place? Similarly, the phrase "the virtual connection changes to at least one other condition, staying with the other route". The meaning of the "at least one other condition" is vague. Also when the "other condition" limitation is taken in conjunction with the "selected condition" a doubt is cast to what the "conditions" consist of?

In claim 17, in addition to the above rejection with reference to base claim 14, it is not clear what is meant by "selecting the at least one selected condition". More specifically, the "at least one selected condition" has the meaning of a selection that had already taken place; therefore having another selection of already selected condition is confusing.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4.   Claims 14-16, 18,19 and 35-37 are rejected under 35 U.S.C. 102(e) as being anticipated by Uphadya et al. (US 5,949,755).

Regarding claim 14, as understood, with reference to figure 2 and 4, Uphadya discloses, a working ring 110, a protection ring 120 for ATM cells transport, and a plurality of nodes A through D, each node is capable of detecting a loss of header error check synchronization (claimed tracking a status of first and second routes for each virtual connection in the ring network) and generating a protection payload data unit. which is egresses to the plurality of nodes and the protection PDU notifies other nodes . Uphadya also discloses that if a failure occurs at the working ring, the network controller directs the switch to egress the ATM cells to the protection ring as shown in Fig. 7, see column 7, lines 9-56. (Claimed when a virtual connection changes to at least one selected condition, switching to the protection route for that virtual connection). Further Uphadya discloses if HEC SYNC is restored, the CPU 200 directs the data path multiplexer to switch the VCs so that the node receives ATM cells from the working ring. See column 6,lines 60-67 and column 7, lines 1-18. (Claimed when the virtual connection changes to at least one other condition, staying with the working route).

Regarding claim 15, Uphadya discloses, in Fig. 6 and 9, identifying a set of virtual connections by a network element that detected the error to determine a set of virtual connections that are affected by the detected error; and tracking a state of the first and second routes for each virtual connection. See column 5, lines 34-56; and column 8, lines 49-51. (Claimed monitoring cells injected in a virtual connection due to at least one of a signal failure, and a signal degradation).

Regarding claim 16, with reference to figure 11, Uphadya shows a fiber cut that is monitored for protection switching of virtual connections. See column 7, lines 19-29.

Regarding claim 18, with reference to figure 11, Uphadya shows a fiber cut that is monitored for protection switching of virtual connections. See column 7, lines 19-29. (Claimed selecting one of signal degradation, signal loss, and ring fault)

Regarding claim 19, with reference to figure 2 and 4, Uphadya discloses, a working ring 110, a protection ring 120 for ATM cells transport, and a plurality of nodes A through D, each node repeatedly performs header error check synchronization (HEC SYNC) to determine whether there has been a loss of HEC SYNC (claimed selecting one condition to trigger protection switching), and that each node is capable of detecting a loss of header error check synchronization (claimed tracking a status of first and second routes for each virtual connection in the ring network) and generating a protection payload data unit. which is egresses to the plurality of nodes and the protection PDU notifies other nodes, Uphadya also discloses that if a failure occurs at the working ring, the network controller directs the switch to egress the ATM cells to the protection ring as shown in Fig. 7, see column 7, lines 9-56. (Claimed when a virtual connection changes to at least one selected condition, switching to the protection route for that virtual connection). Further Uphadya discloses if HEC SYNC is restored, the CPU 200 directs the data path multiplexer to switch the VCs so that the node receives ATM cells from the working ring. See column 6,lines 60-67 and column 7, lines 1-18. (Claimed when the virtual connection changes to at least one other condition, staying with the working route).

Regarding claim 35, with reference to figure 2 and 4, Uphadya discloses, a working ring 110, a protection ring 120 for ATM cells transport, and a plurality of nodes

A through D, each node is capable of detecting a loss of header error check

synchronization (claimed tracking a condition of first and second routes for each virtual

connection in the ring network) and generating a protection payload data unit. which is

egresses to the plurality of nodes and the protection PDU notifies other nodes .

Uphadya also discloses that if a failure occurs at the working ring, the network controller

directs the switch to egress the ATM cells to the protection ring as shown in Fig. 7, see

column 7, lines 9-56. (Claimed when a condition of a virtual connection changes to at

least one selected condition, switching to the protection route for that virtual

connection). Further Uphadya discloses if HEC SYNC is restored, the CPU 200 directs

the data path multiplexer to switch the VCs so that the node receives ATM cells from

the working ring. See column 6,lines 60-67 and column 7, lines 1-18. (Claimed when the

condition of the working route returns to an acceptable level, returning to the working

route for the virtual connection).

Regarding claim 36, Uphadya discloses, with reference to Fig. 6 and 9, a

identifying a set of virtual connections comprises looking in a table of a network element

that detected the error to determine a set of virtual connections that are affected by the

detected error; and tracking a state of the first and second routes for each virtual

connection. See column 5, lines 34-56; column 8, lines 49-51. (Claimed tracking the

condition of the first and second route comprises monitoring the virtual connections for

error cells).

Regarding claim 37, with reference to figure 11, Uphadya shows a fiber cut that

is monitored for protection switching of virtual connections. See column 7, lines 19-29.

Allowable Subject Matter

5.   Claims 1-13, 20-34 and 38-39 are allowed.

Claim 17 would be allowable if rewritten to overcome the rejection(s) under 35

U.S.C. 112, second paragraph, set forth in this Office action and to include all of the

limitations of the base claim and any intervening claims.

Conclusion

6.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure: Kaman et al, US (6,011,780); Kuroyanagi et al, US (6,072,610);

Takahashi et al, US (6,219,336); Lowe et al, US (6,233,221); Sato, US (6,477,288);

Shiragaki et al, US (6,657,952); Potter et al, US (6,674,755).

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to AHMED ELALLAM whose telephone number is (703)

308-6069. The examiner can normally be reached on 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kizou Hassan can be reached on (703) 305-4744. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

AHMED ELALLAM
Examiner
Art Unit 2662
April 28, 2004

HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
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